

INTEGRATED CIRCUIT OSCILLATOR

ABSTRACT OF THE DISCLOSURE

A feedback oscillator device formed with an integrated circuit having a semiconductor material substrate on a ground plane. The circuit has an amplifier having an input and an output is provided at least in part on said semiconductor material substrate. A directional coupler is used to couple the amplifier output signal to the amplifier input through a parallel separated transmission lines transfer system and a capacitor such as a varactor. The substrate can be of gallium arsenide.